RSPCA welfare standards for chickens

February 2008

Certification Mark

Contents

Introduction

The *RSPCA Welfare standards for chickens* have been developed to provide the only RSPCA-approved scheme for the rearing, handling, transport and slaughter of chickens. They take account of legislation, government welfare codes, scientific research, veterinary advice, recommendations of the Farm Animal Welfare Council (FAWC) and the practical experience of the farming industry.

The standards are based upon the 'Five Freedoms' as defined by FAWC (hence the name 'Freedom Food' - see page iv). Although these 'freedoms' define ideal states, they provide a comprehensive framework for the assessment of animal welfare on farm, in transit and at the place of slaughter, as well as representing an important element of farm assurance requirements.

- Freedom from hunger and thirst
  by ready access to fresh water and a diet to maintain full health and vigour.
- Freedom from discomfort
  by providing an appropriate environment including shelter and a comfortable resting area.
- Freedom from pain, injury or disease
  by prevention or rapid diagnosis and treatment.
- Freedom to express normal behaviour
  by providing sufficient space, proper facilities and company of the animal's own kind.
- Freedom from fear and distress
  by ensuring conditions and care which avoid mental suffering.

These freedoms will be better provided for if those who have care of livestock practise:

- caring and responsible planning and management
- skilled, knowledgeable and conscientious stockmanship
- appropriate environmental design
- considerate handling and transport
- humane slaughter.

Guide to the use of the RSPCA welfare standards

(i) At the head of each section the broad objectives of the welfare standards are described.

(ii) The numbered requirements are the standards, all of which must be complied with.

(iii) Boxed sections (indicated by ⓘ) give additional advice or may highlight areas where the standards will be reviewed in the future.

(iv) It is assumed that all relevant legislation regarding farm animal husbandry and welfare on-farm, during transport, and at the abattoir, will be fully implemented in addition to the RSPCA welfare standards.

(v) **Farmers are required by law to have a thorough knowledge of the *'Defra Code of Recommendations for the Welfare of Livestock: meat chickens and breeding chickens'*.**

Freedom Food Ltd

Freedom Food is a wholly owned subsidiary of the RSPCA, formed to implement the RSPCA welfare standards. Upon satisfactory inspection farmers, hauliers, slaughterers, processors and retailers may subscribe to the scheme and use the Freedom Food trademark. All participants are regularly assessed by Freedom Food Ltd. A charge is levied to cover inspection, administration and marketing costs. Participants are also randomly monitored by members of the RSPCA Farm Animals Department, free of charge.

It is the intention of Freedom Food Ltd to establish sister, franchise organisations in other countries working to the RSPCA welfare standards and therefore, in time, establish a common and consistent message for consumers around the world.

Freedom Food Ltd is non-profit making. Any surplus income will be used to fund research into farm animal welfare.

Food and water

Livestock must have freedom from hunger, thirst and malnutrition by ready access to fresh water and a diet to maintain full health and promote a positive state of well-being. Feed and water must be distributed in such a way that livestock can eat and drink without undue competition.

Food

FW 1.1 Chickens must be fed a wholesome diet which:

a) is appropriate to their species

b) maintains them in good health

c) satisfies their nutritional needs

* d) is available to them at all times (except when required by the attending veterinary surgeon)

FW 1.2 Producers must have a written record of the nutrient content of the feed, as declared by the feed compounder.

FW 1.3 Feedstuffs containing mammalian or avian-derived protein are not permitted.

> **FW 1.3 does not include dairy products.**

FW 1.4 The use of in-feed antibiotics, other than for therapeutic reasons, is prohibited.

> **The Veterinary Health Plan (see H 1.1) should consider the use of alternative strategies aimed at reducing the risk of health problems.**

FW 1.5 All treatments given to birds must:

a) only be used under the close supervision of the veterinary surgeon

b) be recorded in the VHP (see H 1.1).

FW 1.6 Food must not be allowed to remain in a contaminated or stale condition.

FW 1.7 There must be a minimum of 25mm of single sided feed trough space per bird.

FW 1.8 Where circular pan feeders are used, there must be a minimum of 1 x 330mm diameter pan feeder per 65 birds.

FW 1.9 Where a new feeding system is installed, this must be pan feeders.

FW 1.9.1* From 1st January 2010, track feeders will be prohibited.

FW 1.10 Feed distribution must ensure uniform feed availability throughout the entire feeder system.

FW 1.11 Chickens must not have to travel more than 4 metres anywhere in the house to reach food.

FW 1.12 The siting of feeders and drinkers must be such that increased activity is encouraged in the birds.

FW 1.13 The use of anti-perch wire over track feeders is prohibited.

FW 1.14 * Wire over feeders must not be electrified.

> ⓘ **Where used, anti-perch wire should be covered with plastic tubing to help discourage birds from attempting to perch on it.**

Water

FW 2.1 Chickens must have continuous access to an adequate supply of clean, fresh drinking water at all times, except when required by the attending veterinary surgeon.

FW 2.2 Water must not be allowed to remain in a contaminated or stale condition.

FW 2.3 Provision must be made for supplying water in freezing conditions.

FW 2.4 The minimum number of drinkers which must be provided are as follows:

Bell	1 per 100 chickens
Nipple	1 per 10 chickens
Cup	1 per 28 chickens

> ⓘ **It has been shown that certain systems of drinker (360° nipple, high flow rate) can be provided at a minimum of one drinker per 20 chickens. Producers who have installed alternative designs of drinker facilities should discuss their suitability with an RSPCA Farm Livestock Officer.**

FW 2.5 Where a new drinking system is being installed, this must not be bell drinkers.

FW 2.6 Drinkers must be of a design that reduces water wastage.

FW 2.7 Drinkers must:

a) be placed at optimum height for the size and age of the birds

b) be of an appropriate design.

FW 2.7.1 Chickens must not have to travel more than 4 metres anywhere in the house to reach water.

FW 2.8 A water storage tank (with fitted lid) must be installed on-site which is capable of providing water to the flock of all ages for a period of at least 24 hours when mains water supply is cut off.

FW 2.9 Water meters must be connected to all the birds' drinking systems (see M 1.3e).

FW 2.10 * Wire over drinker lines must not be electrified.

> ⓘ **Where used, anti-perch wire should be covered with plastic tubing to help discourage birds from attempting to perch on it.**

Environment

The environment in which livestock are kept must take into account their welfare needs, be designed to protect them from physical and thermal discomfort, fear and distress, and allow them to perform their natural behaviour.

E 1.1 Where management systems, designs or layout of facilities not covered in the RSPCA welfare standards are being employed or considered, these must be referred to, and discussed with, the RSPCA Farm Animals Department before they can be considered for certification.

E 1.2 * Bird welfare must not be compromised/or be likely to be compromised by outside environmental factors, such as noise, atmospheric pollution, adverse weather conditions, and predators and, in the case of free-range systems, soil conditions.

Buildings

It is essential that buildings are of a size to ensure that ventilation is sufficient to maintain good air and litter quality. Therefore, as a guide, experience suggests that for smaller buildings, such as mobile arcs, which are around 4m long and house approximately 500 birds, a minimum ceiling height of 2.5m to the ridges should be provided. It is recommended that larger buildings have a minimum ceiling height of 3m. The sides of buildings should be approximately 0.6m high to allow for popholes, if necessary.

E 2.0 * All chickens must be provided with accommodation.

E 2.1 For all accommodation, a notice containing a checklist of the key points relating to welfare (see E 2.1.1) must be prominently displayed at, or near, the entrance to each building

E 2.1.1 The checklist to satisfy E 2.1 must include:

a) total floor area available to the birds
b) total number of birds
c) total number of drinkers and feeders
d) target air quality parameters
e) lighting levels and regimes
f) emergency procedures, i.e. actions in the case of fire, flood, failure of automatic equipment, and when temperatures move outside acceptable limits.

E 2.1.2 * Buildings must be designed and erected to be suitable for expected local weather conditions.

E 2.2 New housing or housing undergoing major structural change must be designed to allow easy removal and minimal carrying and handling of birds during depopulation.

E 2.3 There must be nothing in the chickens' environment that is likely to cause injury or distress to the birds that can be avoided.

E 2.4 Internal walls must be smooth, unobstructed and constructed of a durable material capable of withstanding clean-out procedures.

E 2.5 Except where preservatives with an insecticidal role are used, chickens must not come into contact with toxic fumes or surfaces, for example, from paints, wood preservatives or disinfectants.

E 2.6 All electrical installations at mains voltage must be:

a) inaccessible to the chickens
b) well insulated
c) safeguarded from rodents
d) properly earthed
e) tested at least annually by a qualified or competent person

* ⓘ **Electrical installations have to be tested every 3 years as part of the Periodic Inspection Report, in order to meet legal requirements relating to electrical safety. However, at least once a year, the 'trip switch' should be tested to ensure it is in correct working order.**

E 2.7 The apron must be level to facilitate the loading of birds at the time of depopulation.

E 2.8 The apron immediately surrounding the outside of the house must:

a) be kept clean and tidy
b) not offer shelter to wild birds or rodents
c) be well-managed, with vegetation kept short.

ⓘ **Where possible, the apron should be concrete to ensure effective disinfection once the building has been emptied and cleaned.**

Floor and litter

E 3.1 Chicken house flooring must allow for effective cleansing and disinfection, preventing a significant build-up of parasites and other pathogens.

ⓘ **Where possible, the house floor should be concrete that is well maintained.**

E 3.2 Fresh litter must be stored indoors in hygienic, rodent-proof premises.

E 3.3 Where internal house floors are concrete, a damp-proof membrane must be fitted.

E 3.4 The floor of all houses must be completely covered in litter.

E 3.5 The litter must:

a) be of a suitable material and particle size

b) be managed to maintain it in a dry, friable condition (and replaced where necessary)

c) be maintained at an average minimum depth of 5cm to allow for the dilution of faeces

d) allow birds to dust bathe

e) be topped up daily, if necessary, with fresh litter

f) be managed hygienically.

* **It is a legal requirement to keep the litter in a well-maintained state.**

E 3.6 Good quality litter must be used.

Wood shavings is the preferred substrate.

E 3.7 Chicken must have access to the litter area at all times.

E 3.8 Stock-keepers must:

a) be aware of the welfare problems associated with poor litter management

b) understand the factors that affect litter condition, i.e. moisture, nitrogen content and greasy capped litter.

Lesions to the hock and foot pad, also referred to as burns, are caused by contact with litter which is both wet and contains a high level of ammonia from faeces. Such lesions can cause pain, act as a gateway for bacterial infection and have been shown to be positively correlated with lameness.

No bird should have such lesions. However, whilst working towards this target, the average level of both foot pad and hock burn for birds kept indoors should not exceed 4.0%. This has been practically demonstrated to be a realistic target on commercial indoor chicken farms working to the *RSPCA Welfare Standards for Chickens*. No bird should have severe burns.

If the average level of either foot pad or hock burn exceeds 4.0%, then the producer should demonstrate that this issue is being effectively addressed. Management practices seem to be the most important factor in preventing the occurrence of poor litter condition and therefore these lesions.

Lighting

E 4.1 In each 24 hour period, chickens must be provided with:

a) a minimum period of 8 hours continuous light

b) a minimum period of 6 hours and a maximum of 12 hours continuous darkness, except:

i) for birds up to a maximum of 7 days of age and 3 days prior to slaughter, when the minimum continuous darkness must be at least 2 hours

ii) where natural light is provided and the natural period of darkness is shorter than 6 hours.

E 4.2 Lighting patterns in all houses must be recorded.

> ⓘ **Where possible, the lighting pattern should be recorded automatically.**

E 4.3 * There must be an average minimum illumination of 100 lux over at least 75% of the floor area.

> ⓘ **Chickens have well-developed colour vision. The report on '*The Welfare of Chickens Kept for Meat Production'* by the Scientific Committee for Animal Health and Animal Welfare's (2000, p. 62) concluded that brighter lighting (e.g. more than 100 lux) is important to stimulate activity. Increased activity can help reduce the incidence of leg disorders and contact dermatitis, such as hock and foot pad burn.**

E 4.4 * No area must be lit at less than 20 lux.

* ⓘ **Measures of illuminance are to be taken at bird head height.**

* ⓘ **Research has shown that chickens prefer different light intensities for the performance of different activities. Dimly lit areas provide the opportunity to rest, whilst brighter lit areas provide the opportunity to perform more active behaviours. Perches should be positioned in the dimly lit areas.**

E 4.5 Artificial light must be switched on and off:

a) in a stepped or gradual manner

b) over a period of at least 15 minutes.

> ⓘ **Standard E 4.5 does not apply where natural light is provided (see E 5.1 to E 5.10).**

* ⓘ **Research has shown that turning artificial lights off gradually promotes natural settling behaviour and stimulates birds to have a last meal, which can help increase feed conversion efficiency. The Scientific Committee for Animal Health and Animal Welfare's report on The Welfare of Chickens Kept for Meat Production (2000, p. 61) recommends that changes in illuminance should take place over about 30 minutes, to allow chickens sufficient time to prepare for the light and dark period. The RSPCA intends to move towards the 30 minute recommendation in the near future.**

E 4.6 Adequate lighting, whether fixed or portable, must be available to enable the chickens to be thoroughly inspected at any time.

* Natural light

* **The following standards apply where natural light is provided.**

E 5.1 * Chickens reared in all systems must be provided with natural light by 1st January 2010.

* **The introduction of natural light into chicken houses is likely to be beneficial to bird welfare by, for example, increasing activity and enriching the birds environment. Natural light can provide a range of illuminance levels in different areas within the house, which changes throughout the day, and is spectrally different to artificial sources.**

* **As a guide, based on practical experience, the light openings should correspond to at least 3% of the total floor area of the house. However, 6% should be a target. Alternatively, the light openings should constitute a minimum of 75% of the length and 15% of the height of the two longest side walls of the building.**

E 5.2 * Each light opening must be no smaller than 0.56m^2 (e.g. 0.75m x 0.75m or 1.0m x 0.56m).

E 5.3 * It must be possible to readily control the amount of daylight entering the building to the extent that no daylight can enter the house.

* **Installing, for example, shutters can control the amount of light entering through the light opening. Shutters are especially important to control the ingress of direct sunlight, which can increase the risk of heat stress. The shutters can be used to completely block any light entering the house, which is useful during catching and also at night where events outside the house could cause birds to panic. To have the greatest amount of control over the light entering the house it should be possible to open/close the shutters by varying degrees, which could be achieved manually or mechanically.**

* **The provision of daylight – particularly via windows - can increase environmental temperature within the house. Therefore it is important to consider the capacity of the ventilation system and the positioning of the ventilation inlets so that good ventilation and correct house temperature can be achieved. In the event of excessive heat, shutters can be used to block out sunlight. The shutters, especially if insulated, can also help keep the building warm during cold weather, which is important during the brooding phase (also see E 7.5 to E 7.11).**

E 5.4 * Where glass is used, this must be safety/toughened glass.

* **The use of transparent glass windows is strongly encouraged, as this will allow birds to see out of the building, further enriching their environment. Transparent glass windows also provide good light, with minimal filtering and distortion, and do not discolour with time.**

* **Window material that helps prevent condensation forming should be selected, e.g. double-glazed windows.**

E 5.5 * Birds must be exposed to natural daylight as soon as possible, and certainly no later than 7 days of age.

* **Experience has shown that exposing birds to events occurring outside the house at an early stage allows them time to develop recognition and familiarity and therefore reduce their fearfulness towards them.**

E 5.6 * Natural light must penetrate all areas of the house.

* **It is important to ensure that a sufficient number and size of light inlets are provided to ensure the lighting requirements can be achieved at all times. Installing light openings down both sides of a house can allow greater control over the light entering the building. For example, if the shutters on one side of the house have to be closed to block out direct sunlight then daylight can still enter the building through the inlets on the opposite side. Similarly, more than the suggested amount of total window space for a building should be provided.**

E 5.7 * Where areas of different light intensity are provided there must be a:

a) near uniform distribution of light in each area

b) gradual change in light intensity between each area.

* **Where there are patches of bright light, for example when windows are not evenly distributed around the house or when windows are not of a similar size, bird activity may be greater in the more illuminated areas, which could adversely affect litter quality (see E 3.5).**

E 5.8 * Natural daylight must be provided at all times during the natural daylight period.

E 5.9 * Birds must be exposed to dawn and dusk periods.

* **This can be achieved through natural or artificial means (see E 4.5).**

E 5.10 * Where used, windows must be properly sealed, so correct airflow within the house can be maintained and draughts avoided.

* **Further guidance and advice on providing natural light can be obtained by contacting the RSPCA Farm Animals Department.**

Stocking density

E 6.1 * Stocking density, which is to be calculated using the floor space available to the birds, must never:

a) exceed 30kg/m^2

b) be likely to exceed 30kg/m^2 (applies to current flock)

c) exceed 19 birds/m^2.

* **For Freedom Food members, E 6.1(a) not only applies to the current flock, but also to the previous 3 Freedom Food-accredited flocks, where applicable.**

E 6.1(b) will be based on predicted outcomes for the current flock, using data from the records listed in M 1.3.

Exceeding 20 birds/m^2 is likely to increase competition for floor space, feed and water. Research also indicates that birds placed at above 19/m^2 have higher 7d mortality, a higher number of daily leg culls, and are more behaviourally restricted. In addition, good ventilation and litter control becomes more essential as stocking density increases.

E 6.1.1 The maximum stocking density of 30kg/m^2 must not be reached more than once during a bird's lifetime.

E 6.2 Records must be kept that enable the stocking density to be easily verified by the producer/Freedom Food assessor/RSPCA Farm Livestock Officer at any time (see M 1.3)

Air quality and thermal environment

E 7.1 Provision must be made to ensure that aerial contaminants do not reach a level at which they are noticeably unpleasant to a human observer.

E 7.2 Ventilation systems, natural or forced, must be designed to maintain air quality.

E 7.3 Inhalable dust, carbon monoxide and other aerial contaminants within chicken buildings must be kept at levels which comply with COSHH regulations.

E 7.4 There must be, averaged over an 8 hour period:

a) dust not exceeding 10mg/m³

b) carbon monoxide not exceeding 50ppm.

Other air quality parameters should be maintained, under all foreseeable climatic conditions, below the following levels at bird head height:

Ammonia	**15ppm**
Carbon dioxide	**5000ppm**

The measurement for relative humidity should be between 50% and 70%.

Where practically feasible, air quality parameters, i.e. ammonia, carbon dioxide, carbon monoxide, etc., should be measured and recorded on a weekly basis. Where a level higher than that specified within the RSPCA Welfare Standards is recorded, daily recordings should be made until an acceptable level is achieved and maintained.

Where possible, these levels should be automatically recorded.

E 7.5 Provision must be made to ensure that chickens have access to a thermally comfortable environment at all times.

A chicken functions most effectively at a body temperature of about 41ºC. Any deviations from this will have increasingly severe consequences to its welfare: a rise in body temperature of only 4 to 5ºC is invariably fatal.

The thermal comfort zone of a chicken in an open space away from other birds is 8 to 30ºC: varying primarily according to bodyweight, relative humidity and air speed.

E 7.6 The design of buildings must be such that risks of overheating are minimised; for example, by installation of an evaporative cooling system or roof insulation.

E 7.7 All buildings must be able to cope with a temperature lift of 3ºC.

E 7.8 Maximum and minimum temperatures must be recorded daily.

E 7.9 Ventilation equipment must be maintained in good working order.

E 7.10 Alarm systems must be installed where there is any risk of failure of ventilation equipment.

E 7.11 Stock-keepers must:

a) have access to a copy of the Defra booklet, '*Heat Stress in Poultry: Solving the Problem'* (PB 10543, 2005)

b) be familiar with its content

c) adopt its recommendations.

Environmental enrichment

The inclusion of environmental enrichment, such as straw bales, perches, pecking objects, scattering of whole grain and the provision of brassicas have been found to improve bird health and welfare by encouraging birds to be more active thereby promoting improved leg strength.

E 8.1 Environmental enrichment provisions must be:

a) made available to the chicks as soon as possible, and certainly no later than from 7 days of age

b) maintained / replaced throughout the rearing period, as necessary.

E 8.2 For every 1,000 birds, the following provisions must be provided as a minimum:

a) 1.5 straw bales,

b) 2m of perch space, and

c) one pecking object, e.g. peck-a-blocks, brassicas (e.g. cabbage, cauliflower, spouts, broccoli), hanging wooden blocks.

The use of additional items is strongly encouraged to promote greater bird activity.

As a guide, practical experience has shown that:

a) chickens prefer to perch on lengths of rectangular, wooden baton with rounded edges.

b) perch height should be between 10 to 30cm from the floor depending on the size and breed of the chickens.

c) chickens prefer a perch width of between 4 and 6 cm.

d) a perching space of 15 to 20cm per bird should be provided.

e) approximately 20% of birds will choose to perch at any one time (this is important for calculating perch space per bird, i.e. based on 20% usage, 1000 birds will require 40m of perching space to achieve 20cm per bird).

Where applicable, sufficient space should be provided to allow birds to perch adjacent to each other.

* **Allowing birds to perch on top of drinker lines will not satisfy standard E 8.2(b). Birds perching on drinker lines could:**

a) contaminate drinker cups with faecal material and/or dirt from their feet

b) restrict other birds from accessing the drinkers

c) defecate on birds that are drinking

E 8.3 * Perches must:

a) be designed to avoid damage/injury to the bird

b) be accessible and easily seen by the birds

c) be elevated

d) support the whole of the bird's foot

e) allow the bird to curl its toes around the object without obstruction to express its normal perching behaviour

f) be deep enough so that the chickens cannot puncture their own footpads by curling their toenails around the bottom of the perch.

ⓘ **Perches should be positioned at a height to facilitate perching at an early age. It is recommended that perches are made visible by, for example, painting them white or using brightly coloured adhesive strips, to help birds negotiate them during the dark period.**

* ⓘ **Crates and straw bales will not count towards the perching space requirement.**

E 8.4 * Where perches are aligned adjacent to each other there must be a gap of no less than 1.5cm between them to allow the chicken to grip the perch without risk of trapping its feet.

E 8.5 * For adjacent perches to be counted as separate perch space they must be spaced at least 30cm apart.

The range

The RSPCA Welfare standards for chickens do not insist on chickens having access to range. Where they do, the following welfare standards must be met in addition to all other relevant standards in other sections of this document.

R 1.1 For free-range systems, managers must be aware of the EU Poultrymeat Marketing Standards Commission Regulation (EEC) No 2891/93EC with regard to stocking densities, access to range and minimum age at slaughter.

R 1.2 Producers must demonstrate that every effort has been made when applying for planning permission to ensure the most efficient utilisation of the range area.

R 1.3 The outdoor area in free-range systems must:

a) be designed and managed in ways which ensure that the area around the house does not become poached

b) consist of pasture mainly covered by living vegetation.

R 1.4 Chickens with access to range must have access to a well-drained area for resting whilst outside the building.

R 1.5 Where there is a risk of a build-up of parasites or disease on free-range land, rotational grazing or other disease control measures must be applied.

R 1.6 Producers must take all reasonable steps to encourage use of the range by the birds.

Free-range chickens should have access to areas of shelter to not only offer cover from adverse weather conditions but also offer regions of variation and enrichment. Both natural and artificial shelter is recommended. Natural shelter should include the planting of trees and shrubs or semi-permanent vegetation that can be easily established and removed, such as artichoke and kale. Research has demonstrated that chickens prefer taller vegetation, i.e. trees and shrubs. Artificial shelter could include the erection of military netting and sun parasols, and the provision of straw bales and trailers.

The amount of total shelter provision (calculated in m^2) should be calculated on the basis of the formula: $m^2 = ((Nx0.3)W)/38$ where N is the number of birds in the flock, W is the expected average bird live weight at depopulation and 38 is the recommended stocking density for shelter provision. For example, 1000 birds reared to 2.2kg and stocked at 38kg/m^2 will require a minimum total shelter area of 17.4m^2 (i.e. $m^2 = ((1000x0.3)2.2)/38$). This could take the form of 2 x 8.7m^2 areas, for example.

R 1.7 * A minimum area of overhead shade and shelter (natural, artificial or a combination of both) of 8m^2 per 1,000 chickens must be provided.

* **Calculations of the overhead shade/shelter area will be based on the amount of shade provided by the object/facility.**

* **Vegetation that does not provide overhead shade/shelter, and therefore cannot be included in the calculation of 8m^2 per 1,000 chickens, includes:**

  i. immature trees that have yet to produce foliage

  ii. deciduous trees when they have lost their foliage, e.g. during winter

  iii. tall growing crops, such as kale

  In such cases, artificial shelters will need to be provided until trees are mature/have sufficient foliage cover.

  Hedgerows may be included in calculations of overhead shade/shelter, provided that there is enough room underneath for chickens to access. However, at certain times of the day, the position of the sun may mean that the hedgerow is not offering any protection in terms of shade. As shade/shelter provisions must be appropriately distributed, hedgerows alone will not satisfy R 1.7.

  Tractor trailers and simple shelters constructed of four downward posts and a solid roof, for example, are acceptable forms of shade/shelter provision. Fences, on the other hand, which do not provide overhead protection, are not suitable for this purpose.

R 1.8 * Shade and shelter facilities must be appropriately distributed to encourage full use of the range.

R 1.9 * The range must be managed in order to provide the most suitable conditions to encourage the birds to roam.

* **Ways of satisfying R 1.9 include:**

  i. positioning shade and shelter facilities at varying distances from the house

  ii. the rotation of artificial shelters in order to prevent poaching of the land around them

  iii. the trimming of hedgerows so that access is provided underneath

  iv. restricting access to certain areas of the range as and when necessary in order to prevent poaching of the land

  v. managing poached areas to aid recovery and prevent poaching reoccurring in the same area

  vi. an appreciation of the need to take individual flock behaviour into account: some flocks may be reluctant to range and therefore need encouraging by, for example, providing a sheltered route onto the range.

R 1.10 Birds must be introduced onto the range:

a) as soon as they are mature enough

b) in any case, from at least 28 days of age.

R 1.11 * A contingency plan must be in place detailing how birds will be managed if they have to be housed for extended periods of time, for example during an outbreak of a contagious disease, such as Avian Influenza.

Access to the range

R 2.1 * Chickens kept in free-range systems must have continuous daytime access to the range.

R 2.2 All popholes must be kept open to satisfy R 2.1, except when this is precluded by inclement weather conditions.

R 2.3 Each pophole must be no smaller than:

a) 45cm high, and

b) 50cm wide.

R 2.4 The following minimum pophole numbers must apply:

Number of birds	Number of popholes
Up to 600	1
More than 600	1 per 700 birds (minimum of 2)

It is strongly recommended that more than the minimum number of popholes are installed to allow for adjustment during unfavourable weather conditions. For example, to remain compliant with the requirements on a windy day, only popholes on the leeward side may need to be opened if there are a sufficient number installed.

R 2.5 The total length of the popholes must be at least 4m per 100m² of the surface of the house.

R 2.6 Popholes must be distributed along the entire length of the building.

R 2.7 Where birds have access to the range via a veranda, the specification for popholes between the house and the veranda must satisfy the requirements stated in R 2.3 and R 2.5.

Producers may consider the use of balanced ventilation systems, which may help to maintain an even flow of air throughout the building including the veranda area. Where automatic equipment is employed, producers should refer to standard E 7.10.

R 2.8 Popholes leading from the house to the veranda (where provided) and from the veranda to the range must be placed so as to avoid uneven air movement within the building.

R 2.9 The sides of the veranda must be of solid, waterproof material from ground level to at least the top of the pophole.

R 2.10 The roof of the veranda must be entirely waterproof and insulated.

R 2.11 Where gale breakers or mesh-type material is used, any damage must be repaired promptly.

R 2.12 The construction of the veranda must allow for effective cleaning and disinfection.

R 2.13 Litter must be provided in the veranda to satisfy standards E 3.4 and E 3.5.

R 2.14 The total floor area occupied by the veranda on either side of the house must occupy no less than 20% of the calculated floor area within the house.

R 2.15 Provisions must be made to prevent the area surrounding the building from flooding during wet weather.

Chicks

The following standards apply to the rearing and handling of chicks. They must be read in conjunction with the rest of this document.

* Chick sourcing

C 1.1 * Chicks must:

a) be hatched according to the *'RSPCA Welfare Standards for Hatcheries'*

b) be sourced from a Freedom Food-accredited hatchery

Specific provisions for chicks

C 1.2 Day old chicks must be:

a) handled carefully

b) placed in an appropriate environment.

C 1.3 For brooding and rearing of chicks the placement of feeder/drinker/number of birds, stocking density, air quality, ventilation, lighting, must be as the breeding company's management guidelines.

C 1.4 Great care must be taken to avoid heat stress, particularly when chicks are at a maximum stocking density.

C 1.5 Particular care must be taken in the placement and maintenance of brooder heaters to ensure against risk of fire and emission of carbon monoxide.

C 1.6 The brooder must be suspended above the centre of the surround.

C 1.7 The height of the brooder must be adjustable to ensure that the temperature at the level of the litter is maintained at the optimum level.

C 1.8 Brooder surrounds and feeding and watering equipment within the surround must be designed and constructed such that chicks can move freely towards or away from the brooder.

C 1.9 Throughout the brooding period the behaviour of the chicks must be closely monitored and the brooders adjusted accordingly.

C 1.10 Supplementary lighting must be hung next to the brooder for the first few days after placement to attract chicks to the heat source and provide extra illumination of feeders and drinkers.

C 1.11 Care must be taken to ensure that feeders do not become hot, especially when metal feeders are used.

C 1.12 Supplementary feed trays and small water fonts must be provided in addition to the automatic tube feeders and drinkers at the start of brooding.

> ⓘ **For the first several hours after placement, cardboard egg trays can be used as additional water containers.**

C 1.13 Feeders and drinkers must be kept clean and free from litter.

C 1.14 Where birds are moved during the rearing cycle from one building to another, the following standards must be applied:

a) Feeders and drinkers used on the finishing unit must be included within the initial rearing stages.

b) Changes to the diet must take place gradually over a period of at least 3 days.

c) Where birds are due to move to a naturally-lit environment, or to a building where the lighting levels do not reflect the lighting environment during rear, changes in lighting levels must take place gradually over a period of at least 3 days.

d) Birds must be caught and transported in accordance with standards T 1.1 through to T 2.13, with the exception that stocking density must be reduced by at least 30%.

e) The rearing site and finishing site must each be managed as 'all-in / all-out.'

Management

A high degree of caring and responsible management and stockmanship is vital to ensure good animal welfare. Managers and stock-keepers must be thoroughly trained, skilled and competent in animal husbandry and welfare, and have a good working knowledge of their system and the livestock under their care.

M 1.0 * All records and other documentation that the *'RSPCA welfare standards for chickens'* require the producer to keep and maintain, must be made available to the Freedom Food Assessor and RSPCA Farm Livestock Officer.

Managers

M 1.1 Managers must ensure that all stock-keepers:

a) have access to a copy of the current version of the *'RSPCA Welfare standards for chickens'*

b) are familiar with its content

c) understand and apply its content.

M 1.2 All farm managers and assistant farm managers must have undertaken or be working towards suitable recognised validated poultry training.

M 1.3 Managers must:

a) ensure all stock-keepers have completed relevant and adequate training and can satisfy the Freedom Food Assessor and RSPCA Farm Livestock Officer of their competence in practical circumstances

b) develop and implement plans and precautions to prevent and cope with emergencies such as fire, flood, breakdown of environmental control systems or interruption of supplies, e.g. food, water, electricity

c) provide an emergency action board, sited in a prominent position, highlighting the procedures to be followed by those discovering an emergency (e.g. a fire, flood, power failure): the location of water sources for use by the fire brigade; a map grid reference; and a postcode for the location of the unit

d) develop and implement a biosecurity plan to minimise the risk of introducing disease onto a site and ensure that the Veterinary Health Plan is written, implemented and regularly updated

* e) maintain records of production data for each house, which include documentation on:
  - details of the number of birds placed
  - incoming and outgoing stock
  - the daily mortality (the cause of death must be stated where this can be identified)
  - the number culled (including reasons for culling)
  - the average weight of birds removed for slaughter.
  - feed consumption
  - daily water consumption (see FW 2.9)
  - maximum and minimum temperatures
  - relative humidity
  - ventilation (including settings and any necessary changes)

f) develop and implement a transport plan to Freedom Food approved abattoirs which minimises waiting time for the birds.

M 1.4 Managers must take into account the abilities of the stock-keepers when:

a) deciding on stocking densities for present systems

b) when considering expanding the unit or installing more complex equipment.

Stock-keepers

M 2.1 Prior to being given responsibility for the welfare of livestock, stock-keepers must be properly trained and competent to:

a) recognise signs of common diseases

b) know the appropriate actions for treatment of common diseases

c) recognise signs of normal behaviours, abnormal behaviour and fear

d) understand the signs that indicate good health and welfare

e) understand the environmental requirements for chickens

f) handle chickens in a positive and compassionate manner.

M 2.1.1 * Training relating to M 2.1 must be validated.

M 2.2 Stock-keepers must be aware of the welfare problems associated with poor litter management, e.g. hockburn, foot pad lesions and breast blemishes (see also E 3.8).

M 2.3 When an outbreak of abnormal behaviour occurs, it must be tackled immediately by appropriate changes in the system of management.

M 2.4 Stock-keepers must be able to recognise a potential welfare problem in its earliest stages, enabling them to identify the cause and put matters right immediately.

M 2.5 Stock-keepers must be able to demonstrate their proficiency in procedures that have the potential to cause suffering, e.g. injections.

Inspection

M 3.1 Birds, and the facilities on which birds depend, must be inspected a minimum of 3 times daily.

M 3.1.1 At least one of the inspections relating to M 3.1 must be sufficiently thorough to identify any bird that is showing signs of sickness or injury.

M 3.2 The records of inspection must be dated, signed and the time of inspection noted.

M 3.3 On completion of inspection, records must be kept of ill and injured birds.

M 3.4 Causes of illness and injury must be recorded.

M 3.5 Any welfare problems seen during an inspection must be dealt with appropriately and without delay.

> **Welfare problems of sufficient severity that they should have been noticed on previous inspections and dealt with, shall be taken by the Freedom Food Assessor or RSPCA Farm Livestock Officer as evidence of negligence of duties by the stock-keeper.**

M 3.6 Work routines and practices must be developed, and where necessary modified, to ensure that chickens do not become fearful and are not frightened in avoidable ways.

M 3.7 All movement throughout the unit must be slow and deliberate, both to alleviate fear and reduce possible injury to birds.

Equipment

M 4.1 Stock-keepers must inspect the equipment, including the automatic equipment, upon which chickens depend, at least once daily to check that there is no defect in it.

M 4.2 Where a defect relating to M 4.1 is found it must be rectified immediately.

M 4.2.1 If M 4.2 is impracticable, such measures as are required to safeguard the birds from suffering unnecessary pain or distress as a result of the defect must:

a) be taken immediately

b) be maintained until the defect is rectified.

M 4.3 It must not be possible to deactivate the alarms fitted to automatic equipment on which birds depend, i.e. feeders, drinkers and ventilation.

M 4.4 The alarms must be checked daily to ensure they are in correct working order.

M 4.5 Additional equipment or means of ventilation must be available (whether automatic or not) which, in the event of such a failure of the ventilation system, will provide adequate ventilation so as to prevent the birds from suffering unnecessary distress as a result of the failure.

M 4.6 An auxiliary power supply which is capable of providing instant start and power supply to the house and all equipment within the house for a 24 hour period must be situated on site.

M 4.7 The power supply must be tested once weekly and the outcome of the test recorded.

M 4.8 For existing or new equipment which is used in management, e.g. heaters, lighting, ventilation (flaps/fans), stock-keepers must be able to:

a) demonstrate an ability to operate the equipment competently

b) demonstrate the ability to carry out routine maintenance

c) recognise common signs of malfunction

d) demonstrate knowledge of action to be carried out in event of failures.

M 4.9 Particular care must be taken in the placement and maintenance of brooder heaters to ensure against the risk of fire.

Pests and predators

M 5.1 Humane precautions must be taken to protect chickens from pests and predators, including rodents.

M 5.1.1 The intrusion of wild birds into non-free-range houses must be prevented with netting or similar material over roof ventilation ducts, windows, etc.

M 5.1.2 Farm dogs and cats must not be permitted in the chicken house.

M 5.2 When developing and implementing farm pest and predator control plans, physical exclusion methods, and the removal of elements in the vicinity of livestock that might encourage the presence of pests and predators (see information box below), must be included.

Methods of physical exclusion and discouragement of pests and predators include:

- **construction/maintenance of fencing appropriate for excluding the pests/predators in question**
- **removal of shelter/cover (e.g. weeds) in the area surrounding livestock buildings**
- **removal/protection of obvious food sources**
- **maintenance/proofing of buildings against pests and predators.**

M 5.3 The farm pest control plan must include provisions that specifically exclude the snaring or gassing of animals.

Health

Livestock must be protected from pain, injury and disease. The environment in which livestock are housed must be conducive to good health. All producers must develop a health plan in consultation with their veterinary surgeon.

H 1.1 A written Veterinary Health Plan (VHP) must be drawn up and regularly updated by the attending veterinary surgeon.

> **The Veterinary Health Plan (VHP) forms a vitally important part of the RSPCA welfare standards with regard to maintaining health and welfare of livestock on farm. RSPCA guidelines have been developed for producers wishing to use these as a basis for a Veterinary Health Plan/Flock Plan, and they are available to Freedom Food producers and their veterinary surgeons from RSPCA Farm Animals Department.**

H 1.2 The VHP (see H 1.1) must contain a salmonella control programme.

H 1.3 Flock performance data must be continuously monitored for signs of disease or production disorders.

H 1.3.1 * For each condition listed in S 3.1 (page 36), a plan must be developed which is designed to prevent any increase in and/or reduce the average level of that condition existing on the farm.

H 1.3.2 * The plans referred to in H 1.3.1 must be incorporated into the VHP (see H 1.1).

H 1.4 If any flock performance parameters fall below the tolerance limits identified in the VHP (see H 1.1):

a) the veterinary surgeon must be informed

b) the VHP must be revised to include a programme of action which will remedy the problem.

H 1.5 Records, including details of any medication, must be kept.

H 1.6 There must be no recurring injuries of a similar nature seen on a number of birds attributable to physical features of their environment or handling procedures.

H 1.7 If recurring injuries are found, a programme of preventative action must be specified in the VHP (see H 1.1).

> **Recurring injuries are those seen on a number of birds, with sufficient similarity to suggest they have a common cause. Injury is described as damage severe enough for the formation of granular scar tissue or defective bones or joints, and to an extent significantly greater than would be caused by accidental bumps or scratches. Attention should be paid to foot lesions.**

H 1.8 Ailing chickens and any chickens suffering from injury such as open wounds or fractures must be:

a) segregated

b) treated without delay

c) if necessary, be humanely killed.

H 1.9 Facilities must be available to segregate sick or injured birds.

H 1.10 Producers must be able to demonstrate that leg weakness control strategies outlined in the VHP (see H 1.1) address both infectious and skeletal causes of leg weakness.

H 1.11 Any chicken which, due to leg problems or other physical conditions, has difficulty in reaching food and water must be:

a) promptly removed from the flock

b) if necessary, be humanely killed.

H 1.12 * Any bird with a gait score of 3 or more, as defined in the information box below, must be humanely killed immediately.

* **A bird's level of lameness can be determined by assessing its walking ability. The following scoring system is based on the University of Bristol's Gait Scoring Guide:**

Score 0 - The bird displays smooth, fluid locomotion
Typically the foot is picked up and put down smoothly and each foot is brought under the bird's centre of gravity as it walks (rather than the bird swaying). Often, the toes are partially curled while the foot is in the air.

Score 1 - The bird has a slight defect in its gait that is difficult to define precisely
The bird may take unduly large strides, be unsteady or wobble when it walks, which produces an uneven gait, but the problem leg is unclear/cannot be easily identified.

Score 2 - The bird has a definite and identifiable gait abnormality, but this does not affect its ability to move
The bird may make short, quick, unsteady steps with one leg, but is not sufficiently lame to seriously compromise its ability to move, i.e. manoeuvre, accelerate and run.

Score 3 - The bird has an obvious gait defect that affects its ability to move (bird welfare is compromised)
The bird may have a limp, jerky or unsteady strut, or splay one leg as it moves. The bird often prefers to squat when not coerced to move, and will not run.

Score 4 - The bird has a severe gait defect
The bird is capable of walking, but only with difficulty and when driven or strongly motivated. Otherwise it squats down at the first available opportunity.

Score 5 - The bird is incapable of sustained walking on its feet
Although it may be able to stand, the bird cannot walk except with the assistance of the wings or by crawling on the shanks.

N.B. Not all the attributes of a score are necessarily identified in a bird.

Where it is difficult to determine between scores 2, 3 and 4 using the Bristol Gait Scoring Guide, the following assessment criteria, developed by the University of California, can be used as an additional tool to aid assessment:

Score 2 - The bird will stand for longer than 15 seconds when undisturbed

Score 3 - The bird will not stand for 15 seconds or longer when undisturbed. The bird will also stand on both feet within 5 seconds of being encouraged (i.e. gentle nudging by the observer)

Score 4 - The bird will not stand on both feet within 5 seconds of being encouraged (i.e. gentle nudging by the observer)

The University of California assessment criteria is to be used to supplement the Bristol Gait Scoring Guide.

* **Lameness is a serious welfare problem in growing chickens, whether caused by infectious agents or growth abnormalities. Research has concluded that welfare is unduly compromised in birds with gait scores of 3 or more (as defined in the information box on gait scoring below standard H 1.12), as birds with such gait scores are likely to experience pain and discomfort. Anatomical evidence has shown that joint pathologies are likely to be painful in chickens in a similar way to humans.**

H 1.13 There must not be any overtly lame birds (Bristol gait score 3 or above).

H 1.14 * Management plans must aim to prevent chickens suffering chronic joint disease or leg deformation.

H 1.15 Where the level at a leg abnormality cull is greater than 3% to 42 days of age, this must be the subject of investigation and reported to the Freedom Food Assessor and RSPCA Farm Livestock Officer.

H 1.16 Any mutilation of chickens is prohibited.

H 1.17 If the mortality level within a house is in excess of 0.3% in 24 hours, a veterinary investigation must be made.

H 1.18 Following depopulation, all houses must be thoroughly cleansed, disinfected and tested free from infectious agents as specified in the VHP (see H 1.1).

H 1.19 Written procedures must be in place, and must be followed at all times, for the safe disposal of pharmaceutical waste, needles and other sharps.

H 1.20 Procedures relating to H 1.19 must be in strict accordance with the relevant waste disposal regulations.

H 1.21 Medicines must be clearly labelled and stored in accordance with the label instructions.

H 1.22 Medicines must be kept in a secure, lockable store that is safe from animals, children and birds.

H 1.23 The medicine store must be separate from food producing areas.

H 1.24 A nominated person must:

a) be responsible for the management of the medicine store

b) keep appropriate records for stock control purposes.

H 1.25 Any medicines used must:

a) be licensed for use in the UK

b) applied in accordance with UK and EU legislation.

It is recommended that producers obtain, read and where appropriate, apply the advice contained within the latest version of *the 'Guidelines on responsible use of antimicrobials in poultry production*', issued by the Responsible Use of Medicines in Agriculture (RUMA) alliance (RUMA, Acorn House, 25 Mardley Hill, Welwyn, Hertfordshire, AL6 0TT; www.ruma.org.uk).

H 1.26 All personnel involved in the administration of animal medicines must be competent to do so.

Growth rate

H 2.1 * The genetic growth rate of a bird must not be greater than 45g per day, on average.

* **H 2.1 will be assessed using:**

a) published breed data supplied by the breed company, and

b) the growth rate achieved on-farm.

The RSPCA believes that the current high growth rate in commercial broiler production raises a number of welfare issues. The Society believes that breeding companies should address effectively the welfare issues associated with the fast growth rate of broilers, which can lead to physical and metabolic disorders.

As a guide, birds will reach a body weight of not more than 2.2kg before 49 days of age, as calculated by the average flock weight.

Casualty killing/slaughter

H 3.1 Each farm must have provisions for the humane killing/slaughter – without delay – of casualty chickens.

H 3.1.1 Casualty killing/slaughter must be carried out by either:

a) a named, trained, competent member of staff, or

b) a licensed slaughterman, or

c) a veterinary surgeon.

It is not illegal to slaughter a bird to prevent further severe suffering if a method of humane slaughter is available on the premises and there is someone competent to undertake the procedure.

The Humane Slaughter Association (HSA) has produced a booklet '*Practical Slaughter of Poultry: A Guide for the Small Producer*'. Producers should obtain a copy of this booklet, from HSA, The Old School, Brewhouse Hill, Wheathampstead, Herts AL4 8AN.

H 3.2 * The only permitted methods of on-farm slaughter/killing are:

a) hand held electrical stunning, immediately followed by neck cutting; to be used if slaughtering on a regular, routine or seasonal basis

b) neck dislocation; to be used in an emergency or for the one-off killing/slaughter of a very small number of birds

c) captive-bolt.

* **Although the captive bolt device has been designed to effectively kill poultry, under current legislation it must be followed by neck dislocation or bleeding; except when used for emergency culling or during disease control operations.**

H 3.2.1 * Neck dislocation must involve stretching the neck to sever the spinal cord and cause extensive damage to the major blood vessels.

H 3.3 Equipment that crushes the neck (e.g. killing pliers) must not be used.

Equipment that crushes the neck is neither quick nor humane.

H 3.4 All personnel must be properly trained and competent to humanely kill/slaughter birds.

H 3.5 If there is any doubt as to how to proceed, the veterinary surgeon must be called at an early stage to advise whether treatment is possible or whether humane killing/slaughter is required to prevent suffering.

H 3.6 If a bird is in severe pain that is uncontrollable it must be promptly and humanely killed/slaughtered.

H 3.7 Where any bird is killed/slaughtered, it must be checked thoroughly to ensure it is dead.

H 3.8 All carcasses must be disposed of strictly according to current legislation.

H 3.9 A record must be kept of how and where all carcasses are disposed of.

H 3.10 * The captive bolt device must be used and maintained according to the manufacturer's guidelines.

Transport

Animal transport systems must be designed and managed to ensure livestock are not caused unnecessary distress or discomfort. The transport and handling of livestock must be kept to an absolute minimum. Personnel involved in transport must be thoroughly trained and competent to carry out the tasks required of them.

Catching

The removal of a proportion of birds from a house for slaughter can compromise the wellbeing of those birds not being caught. For example, those birds to remain in the house after catching can be affected by:

- **Setting up the house for catching.**
- **Temporary withdrawal of feed and water.**
- **Noise and disruption from the catching process.**
- **Forklift operation in the house.**
- **The condition of the house after catching.**
- **The disturbance caused by returning the house to its condition prior to catching.**
- **Thermal discomfort from rapid temperature changes.**
- **Compromises in biosecurity, e.g. the introduction of modules and a forklift, which may not have been cleaned properly thus introducing infectious agents, such as campylobacter.**

The catching process should be managed sympathetically to minimise the above.

The use of a partition, such as curtains or straw bales, to separate caught birds from those remaining in the shed, is strongly recommended.

The partition should:

a) be erected at a suitable time prior to catching to allow birds time to settle

b) provide protection from noise, dust and disruption from the catching team during the catching operation

c) help control the thermal environment by, for example, preventing drafts

d) not reduce the floor area available to those birds not being caught to such an extent that the maximum stocking density of 30kg/m^2 is exceeded.

Where possible, those birds not being caught should have access to food and water during the catching operation.

T 1.1 All personnel involved in the catching and transportation of birds must be properly trained and competent.

Where possible, training related to T 1.1 should be validated.

T 1.2 * Catching team leaders must:

a) be familiar with the content of the Humane Slaughter Association DVD *'Poultry Slaughter – Taking Responsibility*'

b) convey the relevant content to other members of the catching team

c) ensure that the recommendations are applied where appropriate.

* **Where possible all members of the catching team should be familiar with the content of the Humane Slaughter Association DVD *'Poultry Slaughter - Taking Responsibility'*.**

T 1.3 Managers must prepare full and detailed written instructions, with regards to the catching and handling of the birds, for the catching staff.

T 1.4 All catching staff must:

a) have a copy of instructions relating to T 1.3

b) be aware of their duties.

T 1.5 It must be the farm manager's, or named supervisor's, responsibility to ensure:

a) the welfare of the birds throughout the catching process

b) that all catchers work in accordance with the RSPCA's welfare standards.

T 1.6 A nominated member of the catching team must be made responsible for:

a) supervising, monitoring and maintaining high welfare standards throughout the catching process and loading of birds onto the transport vehicle

b) inspecting transport modules to ensure they are intact to eliminate the risk of injury to the birds during loading and transport.

T 1.7 Procedures must be in place to ensure that any concerns regarding the catching techniques used by catching staff are recorded and raised with the area manager.

T 1.8 The removal of birds from a house for slaughter prior to depopulation must not take place on more than one occasion.

Depopulation is defined as the removal of all birds from a house for slaughter.

T 1.9 No bird must be deprived of food for more than 10 hours prior to slaughter.

T 1.10 Birds must have access to water up to the time of catching.

T 1.11 Catching must take place in low or blue lighting to minimise fear reactions of the birds.

T 1.12 Adequate draught-free ventilation at bird height must be provided for uncaught birds up to the time of loading.

T 1.13 Water must be given regularly to the uncaught birds by periodically lowering the drinkers, ensuring that sufficient light is available for the purpose.

T 1.14 Birds which are visibly unfit before loading must:

a) not be transported

b) be humanely slaughtered immediately.

T 1.15 Chickens must be:

a) caught individually by grasping both legs, just above the feet.

b) carried by both legs.

T 1.16 * Birds must be approached calmly and quietly to avoid stress.

* **Resting of the bird's breast against the catcher's leg during carrying can help keep the bird calm.**

T 1.17 No more than 3 birds must be carried in one hand.

T 1.18 Birds must be carried and handled gently and with care.

T 1.19 Carrying distances must be kept to a minimum.

T 1.20 During depopulation, actions must be taken to prevent chickens from crowding together.

T 1.21 Where crowding occurs, the house lights must be raised, the birds spread out calmly and quietly, then allowed to settle before catching is resumed.

T 1.22 Only carriers of the tray type with completely open tops and with a depth of not less than 220mm must be used.

T 1.23 Chickens must be put in transport trays in the house.

T 1.24 The stocking density in each tray must not exceed 57kg of birds/m^2 of tray floor area (also see C 1.14).

T 1.25 Stocking densities relating to T 1.24 must be reduced when birds are being transported during hot weather.

The mechanical harvesting of birds has been shown to offer some welfare advantages compared with manual catching. Units considering using such a system should liaise with the RSPCA Farm Livestock Officer or a member of the RSPCA Farm Animals Department.

Transport

T 2.1 Personnel in charge of chicken transporters must have:

a) completed an approved training course

b) be able to demonstrate their competence in handling chickens when loading and unloading them and while in transit.

T 2.2 All hauliers must have a written 'Standard Operating and Emergency Procedure' to implement during transportation (see Appendix 1).

T 2.3 Where causes of mortality have been identified, prompt action must be taken to prevent further deaths, injury or suffering occurring.

T 2.4 Levels of transport mortality (in chickens from any single source) above 0.1% in any 3 month period must:

a) be the subject of investigation

b) be reported to the Freedom Food Assessor and RSPCA Farm Livestock Officer.

T 2.5 All birds must be slaughtered within 8 hours of loading the first bird into a module.

T 2.6 The time from when the birds leave the farm to arriving at the processing plant must be no longer than 4 hours.

T 2.7 Noise levels, from all sources, must be minimised during loading, unloading and transport.

T 2.8 Every effort must be made to ensure:

a) journeys are completed without unnecessary delays

b) drivers are aware of any potential traffic problems and plan their journey accordingly.

T 2.9 The person supervising the catching and loading of birds must liaise closely with the abattoir to minimise the time birds spend waiting on the vehicle.

T 2.10 If it is necessary to keep birds on board a stationary vehicle, the driver must take action to avoid heat/cold stress to the birds.

* **A major cause of poor welfare and mortality during transport is heat stress, due to inadequate ventilation on passively ventilated vehicles (even in relatively temperate climatic conditions). Similarly, cold stress in transported broilers can also be a major cause for concern. For example, the wetting of birds at passive air inlets under cold conditions (8°C or less) will induce substantial degrees of hypothermia**

Mechanically ventilated vehicles, using fan-mediated extraction ventilation, should be introduced to improve the welfare of poultry in transit by facilitating greater control of the on-board thermal micro-environment throughout the whole vehicle load. Ventilation should be effective in all transport containers.

For conventional poultry transporters, it has been shown that a ventilation rate of 0.6m^3 s^{-1} per tonne live weight of birds results in lower mortality than less good ventilation rates. Also, chickens being transported to slaughter should be carried on vehicles where the ventilation system is capable of maintaining the temperature within the transport container below 26°C accompanied by a relative humidity of less than 75%.

The RSPCA encourages the use of such technology and will monitor its development and review its use for future inclusion within the standards.

T 2.11 Measures must be taken so as to avoid wetting and chilling, such as equipping the vehicle with suitable curtains.

The RSPCA endorses the concerns and recommendations highlighted in the European Food Safety Authority (EFSA) report (2004) on the Welfare of Animals During Transport. In particular, this report highlights that when wetting occurs under cold conditions (i.e. 8ºC or less), this will induce a substantial degree of hypothermia.

T 2.12 Plans must be made in advance, and appropriate action taken, to reduce the risk of heat stress including the daily receipt of meteorological forecasts of predicted temperatures.

At times of high ambient temperature or when high humidity poses a threat to the birds, catching, loading and transportation create particular risks of heat stress.

T 2.13 In periods of hot weather (in excess of 25ºC) chickens must be transported at night or in the coolest parts of the day.

Slaughter/killing

All slaughter/killing systems must be designed and managed to ensure livestock are not caused unnecessary distress or discomfort. The pre-slaughter handling of livestock must be kept to an absolute minimum. Personnel involved in the slaughter must be thoroughly trained and competent to carry out the tasks required of them.

S 1.0 * For those seeking Freedom Food accreditation, the standards relating to the slaughter/killing of chickens (standards with the 'S' prefix) must be assessed by the RSPCA's Farm Animals Department, prior to accreditation.

S 1.1 Chickens must be slaughtered/killed as close as possible to the point of production.

Management

S 2.1 Managers must develop and implement an animal welfare policy which must include:

a) written procedures with regard to maintaining animal welfare in the abattoir

b) the responsibilities and duties of staff

c) emergency procedures.

S 2.2 The animal welfare policy (see S 2.1) must be regularly reviewed and updated.

S 2.3 Managers must appoint at least one trained Poultry Welfare Officer (PWO) who is responsible for the implementation of the animal welfare policy.

> ⓘ **Where possible, the PWO should have attended a recognised, validated training course, e.g. the University of Bristol Poultry Welfare Officer training programme.**

S 2.4 Managers, in conjunction with the PWO, must:

a) develop and implement a training programme for all staff handling and slaughtering/killing birds

b) ensure that staff are properly trained to carry out their duties and be competent to perform them.

> ⓘ **Where possible, training related to S 2.4 should be validated.**

S 2.5 The PWO must make frequent checks throughout the day to ensure that birds are being effectively stunned/killed and are insensible throughout the slaughter operation.

S 2.5.1 * PWOs must:

a) be familiar with the content of the current Humane Slaughter Association's *'Best Practice Guidelines for the Welfare of Broilers and Hens in Processing Plants'*

b) be familiar with the content of the Humane Slaughter Association '*Poultry Slaughter – Taking Responsibility'* DVD

c) convey the relevant content of the publications listed in a) and b) to other members of the slaughter team

d) ensure that the recommendations given in the publications listed in a) and b) are applied where appropriate.

* ⓘ **Where possible all members of the slaughter team should be familiar with the content of the publications listed in S 2.5.1 a) and b).**

S 2.6 Where birds are not being effectively stunned/killed, the PWO must take immediate remedial action.

S 2.7 The managers and PWO must:

a) have access to a copy of the Defra (formerly MAFF) guidelines '*Welfare of Poultry at Slaughter: a pocket guide'* (PB 3476, 1998)

b) be familiar with its content.

* Health monitoring

S 3.1 * The level of the following must be recorded for each flock:

a) hock burn (classified as a score 1 or above in the information box below S 3.2)

b) foot pad burn (classified as a score 1 or above in the information box below S 3.2)

c) breast blisters

d) back scratches

e) dirty feathers (classified as a score 1 or above in the information box below S 3.2).

* ⓘ **The term 'flock' refers to a group of chickens which are placed in a house of holding and present in this house at the same time.**

S 3.2 * The method used to score each condition outlined in S 3.1 must be objective and:

a) differentiate between minor, mild and severe conditions

b) provide consistent results within and between observers

c) provide reliable and accurate data for the level of a condition within a flock.

* **The following scoring system should be used to classify foot pad burn* and hock burn:**

0 (None): No lesion/s present

1 (Minor): Very small and superficial lesion/s, slight discolouration on a limited area, mild hyperkeratosis.

2 (Mild): Substantial discolouration, superficial lesion/s, dark papillae

3 (Severe): Ulcers or scabs of significant size, signs of haemmorrhages or swollen foot pad/hock

If there is an absence of severe foot pad/hock burns, but a lot of class 1 lesions are observed in a flock, then this should be seen as not necessarily a major welfare problem in itself, but as an indication that things can rapidly get worse and that remedial action should be taken.

*** see Appendix 2 for photographic foot pad burn assessment guide.**

* **A minimum of 200 feet per flock should be assessed to determine the average level of foot pad burn for that flock.**

* **The following scoring system should be used to classify dirty feathers (see Appendix 3 for photographic assessment guide):**

0 (None): clean – not significantly dirty

1 (Minor): lightly soiled

2 (Mild): medium soiling

3 (Severe): heavily soiled

* **Assessing birds for dirty feathers should take place on the farm during catching. This will avoid scoring birds that may have become dirty during transport and therefore provide a better picture of on-farm conditions. The stock-keeper and/or catching foreman should assess the birds.**

S 3.3 * Data relating to S 3.1 must be reported back to the producing farm.

Lairage

A number of abattoirs have installed closed circuit television (CCTV) monitors within the pre-slaughter handling and slaughter areas. This allows those responsible for animal welfare within the abattoir to ensure that welfare standards are maintained. The installation of CCTV systems is recommended by the RSPCA.

S 4.1 Where possible, chickens must be unloaded immediately on arrival at the slaughterhouse and placed in an environmentally controlled lairage.

S 4.1.1 * The lairage must be designed to minimise any distress caused to the birds.

* **The design of the lairage includes aspects such as flooring. Uneven flooring can cause physical discomfort to birds when moving them through the lairage in modules.**

S 4.2 Chickens which are held in the lairage must:

a) be protected from direct rays of sun and from adverse weather, i.e. wind, rain, hail, snow etc.

b) be kept within their thermal comfort ('safe') zone, as indicated within the Defra (formerly MAFF) sponsored document entitled '*Guide to Alleviation of Thermal Stress in Poultry in Lairage*' (PB 3724).

The temperatures shown within the 'Guide to Alleviation of Thermal Stress in Poultry in Lairage' document are those measured within the module crate itself, which is approximately 9ºC higher than the surrounding ambient temperature.

S 4.2.1 Temperature and humidity in the lairage must be regularly monitored and controlled.

S 4.2.2 There must be a contingency plan in place to state what action will be taken in the event of heat stress occurring.

S 4.3 The lairage must have reduced or blue lighting.

S 4.4 All birds must be slaughtered as soon as possible on arrival at the processing plant and in any case within 4 hours.

S 4.5 All transport trays or fixed crates must be examined on arrival at the slaughterhouse to identify any birds suffering from injury, heat or cold stress.

S 4.6 Any bird identified as suffering from injury, heat or cold stress must be slaughtered immediately and humanely.

S 4.7 All deaths and injuries must be recorded and reported to:

a) the driver

b) the haulier

c) the PWO

d) the farm manager

before the next consignment from the same source is collected.

S 4.8 Where causes of mortality have been identified, prompt action must be taken to prevent further deaths, injury or suffering occurring.

S 4.9 Once chickens have arrived at the premises at which they are intended to be slaughtered/killed, they must not be moved on to other premises for slaughter/killing.

S 4.10 Standby equipment, e.g. a generator, must be available for emergency breakdowns.

Shackling

S 5.1 Shackling teams must be thoroughly trained to handle the birds in such a way so as to avoid injury and bone breakage.

S 5.2 Slaughterhouse managers must ensure that sufficient personnel are employed on shackling lines at all times to ensure due care and diligence.

S 5.3 Shackles must be of a size and type, and the slaughter line run at a speed, which permits chickens to be hung on without causing unnecessary pain or distress.

S 5.3.1 * The shackler must use a handling technique that calms the bird as it is being shackled.

* ⓘ **Gently running the hands down the legs and body of the bird after shackling has been shown to reduce the incidence of wing flapping. Keeping hold of the birds legs for ½ second after shackling has been reported to have a similar effect.**

S 5.4 Birds must be hung on by both legs.

S 5.4.1 * There must be no unevenness in the line causing the shackles to jolt.

S 5.5 * From the point of shackling to entry into the stun bath there must be a:

a) breast comforter to prevent wing flapping and birds raising their heads
b) reduction in noise level
c) maximum light level of 5 lux.

* ⓘ **Breast comforters should be constructed from firm rubber or plastic curtain and extend below the eye level of the bird.**

* ⓘ **The provision of a breast comforter and a reduction in noise and light levels all help to calm the bird and prevent it raising its head, vocalising and wing flapping, which can all be behavioural indicators of discomfort. Wing flapping can cause the occurrence of red wing tips which, as well as being a welfare issue, can result in downgrading of the chicken carcass, detract from the overall appearance of the carcass and lead to loss of total carcass weight if the wings require trimming.**

S 5.6 Care must be taken to ensure that birds cannot:

a) escape from the holding area

b) fall from the shackle line.

S 5.7 Where loose birds are found they must:

a) be taken immediately to the hanging on area

b) if injured, be immediately and humanely destroyed away from the line.

S 5.8 Chickens must not be suspended for more than 60 seconds before they are stunned.

> ⓘ **Shackling a bird can cause discomfort and pain, so it is important to reduce the shackling period to a minimum. However, for an effective stun, it is necessary for the bird to be shackled for a short period, to allow it time to relax and stop wing flapping. Therefore, live chickens should not be suspended for more time than is necessary for wing flapping to cease, which has been shown to be around 15 seconds on average.**

***** S 5.8.1 ***** By 1st January 2010, chickens must not be suspended for more than 30 seconds before they are stunned.

S 5.9 All crates must be checked to ensure that no chickens are left inside them.

Stunning

S 6.1 The following types of stunning equipment are permitted:

a) electrically live stunning bath

b) dry stunner incorporating an electrically-live metal grid or bar

c) hand operated stunner.

S 6.2 Unstunned birds must be screened from dead birds.

S 6.3 Where an electrical stunning bath is used:

a) the stunning bath must be set at a height appropriate for the size and number of birds

b) the height must be set such that the heads of all birds are covered by the water

c) it must deliver an average minimum current of 120mA per bird

d) the current must never go below 105mA

e) it must operate at a frequency of 50Hz with a sinusoidal (AC) waveform

f) each bird must be in contact with the current for a minimum of 4 seconds

g) the water level must be of sufficient depth to cover the heads of the birds

h) the water must not overflow at the entrance to the bath

i) the electrode which is immersed in the water must extend the length of the water bath

j) it must be designed and set up to prevent birds receiving pre-stun shocks

k) it must be fitted with an ammeter to accurately monitor current flow through the bath when loaded with birds.

* ⓘ **50Hz sine wave (AC) is the optimum frequency and waveform for inducing cardiac arrest. The heart muscle is particularly sensitive to this frequency and when sufficient current is applied to the heart it ceases to beat normally and pump blood around the body. Therefore, an effective stun-to-kill can be achieved when using this frequency, which is the most preferred outcome to achieve good welfare during slaughter.**

* ⓘ **A steeply inclined flat ramp bolted on to the entrance of the waterbath can be effective in avoiding pre-stun shocks. The ramp should extend over the water so the birds get drawn up the ramp by the shackle line and then swing down into the water in one smooth movement. This results in the bird's head and wing entering the water together and the bird is stunned immediately**

Care is needed to ensure birds do not receive pre-stun shocks from the ramp itself. This may occur if the ramp is electrically live because of water flowing from the bath onto the ramp, or if it is not isolated from the rest of the stunner.

Source: Humane Slaughter Association (HSA). 2006. *'HSA Technical Note 16: Prevention of Pre-Stun Shocks in Electrical Waterbaths'.* HSA, Wheathampstead, Herts., UK (www.hsa.org.uk).

ⓘ **1A = 1000mA. Therefore, 105mA = 0.105A.**

S 6.3.1 * By 1st January 2010, the shackle – at the point where it meets the chicken's leg - must be continuously sprayed with water using a mist spray, along the entire length of the stun bath.

S 6.3.2 * Stunning using a DC waveform is prohibited.

* **There is mixed opinion from researchers as to the effectiveness of using a DC waveform for stunning chickens. In particular, there are concerns over whether a bird is effectively stunned when subjected to a DC waveform. Current literature on this subject states that DC stunning raises serious welfare concerns and that the use of DC stunning should be actively discouraged. Therefore, the use of DC stunning is prohibited under the scheme until there is further, unequivocal research in this area to suggest that DC stunning would offer at least a welfare neutral alternative to AC stunning.**

S 6.4 All stunning and bleeding equipment must:

a) be properly maintained

b) be regularly cleaned

c) be checked daily to ensure that it is in full and proper working order.

S 6.5 Any problems must be:

a) reported to the PWO

b) rectified immediately.

S 6.6 All birds leaving the water bath must be checked to ensure they have been effectively stunned or killed.

S 6.7 Birds which fail to be properly stunned must be humanely slaughtered before entering the scalding tank.

S 6.8 Staff must be trained to recognise the signs of an effective stun, to ensure that birds have been effectively stunned or are dead.

The most reliable indicator that a bird is properly stunned by the low voltage method is the electroplectic fit. The characteristics of this condition are:

- **no rhythmic breathing**
- **neck arched with head directed vertically**
- **open eyes**
- **absence of a third eyelid (nictitating membrane) reflex**
- **wings held close to the body**
- **rigidly extended legs and constant rapid body tremors.**

The physical conditions of the electroplectic fit are shorter lasting and less pronounced when cardiac arrest is induced at stunning. They are followed by:

- **completely limp carcase**
- **no breathing**
- **loss of nictitating membrane reflex**
- **dilated pupil.**

S 6.9 Contingency plans must be in place to deal with occasions when unavoidable delays may occur and it is not possible to process the birds.

S 6.10 * If the slaughter line is stopped for longer than 60 seconds, birds between the point of shackling and the killer must be humanely killed immediately.

Bleeding

* **Standards S 7.0 to S 7.6 do not apply to gas killing systems, whereby the birds are killed within the system.**

S 7.0 * From 1st January 2012:

a) birds must be decapitated

b) the head must be macerated immediately following decapitation.

S 7.1 Both carotid arteries and both jugular veins must be effectively severed using a ventral cut.

S 7.2 This must be checked by the appointed member of staff who must be given sufficient time to sever the blood vessels manually, if necessary.

S 7.3 No more than 10 seconds must elapse between stunning and neck cutting/decapitation.

S 7.4 * There must be sufficient time after stunning and prior to neck cutting/decapitation to assess the effectiveness of the stun.

S 7.5 All birds must be checked to ensure that they are dead before entering the scalding tank.

S 7.6 No further processing must take place until at least 90 seconds have elapsed since the major vessels in the chickens' necks have been severed.

Controlled Atmosphere Systems (CAS)

The RSPCA believes that the use of gas under controlled conditions (controlled atmosphere systems or CAS) as a means of killing birds can provide many welfare benefits, such as reduced manual handling and avoiding the need to shackle live birds. It is a legal requirement that CAS must be designed to kill the birds and must not be used as a stunning method.

S 8.1 In accordance with WASK Regulations, 1995, as amended, every person engaged in gas killing must be properly instructed as to:

a) the method of operation of the CAS

b) the procedures for any necessary flushing of the CAS with atmospheric air, and

c) the procedures for any necessary evacuation of birds from the CAS.

S 8.2 Permitted gas mixtures:

a) argon, nitrogen or other inert gases, or any mixture of these gases, in atmospheric air with a maximum of 2% oxygen by volume; or

b) any mixture of argon, nitrogen, or other inert gases with atmospheric air and carbon dioxide, provided that the carbon dioxide concentration does not exceed 30% by volume and the oxygen concentration does not exceed 2% by volume.

> **The RSPCA is aware that recent scientific studies have shown that there may be additional welfare benefits to using alternative gas mixtures which are currently not permitted under the UK Welfare of Animals (Slaughter or Killing) Regulations 1995. The RSPCA will review the use of gas mixtures currently permitted in the RSPCA's Welfare Standards in light of any further recommendations made and relevant changes to existing UK Legislation.**

S 8.3 Where more than one type of gas is used, the gases must be mixed thoroughly prior to supply into the CAS.

S 8.4 Daily checks must always be undertaken to ensure that there is a sufficient supply of gas to kill all birds to be received, prior to the commencement of the process.

S 8.5 The gas concentrations must be continuously monitored.

S 8.6 Birds must be:

a) immersed into approved gas mixtures

b) held in that atmosphere until they are dead.

S 8.7 The delivery of gases must be constantly monitored.

S 8.8 Sensors monitoring the concentration of gas must be:

a) fitted in different locations along the equipment

b) clearly marked and readily identified.

S 8.9 The gas monitors/sensors installed in the equipment must be linked to an audible and visual alarm system, which is automatically triggered:

a) when the gas concentration is incorrect

b) when the maximum residual oxygen level is above 2%.

S 8.10 Gas monitoring/sensing devices must be:

a) calibrated at regular intervals, according to manufacturers' advice

b) calibrated using certified calibration gases to ensure the correct concentrations are maintained at all times.

S 8.11 A verifiable record of calibration must be kept.

S 8.12 Chickens must not enter the equipment until the correct gas concentration has been established. This must be controlled automatically.

S 8.13 Chickens must not be subjected to any of the gas mixture prior to entry into the CAS.

S 8.14 There must be appropriate equipment, such as an extractor fitted at the entrance to the equipment, to effectively address standard S 8.13.

S 8.15 All birds must be exposed to the maximum concentration of the gas mixture within a maximum of 10 seconds of entry into the system (WASK Regulation, 1995, as amended).

> **The RSPCA Farm Animals Department is investigating the feasibility of installing CCTV equipment inside the Controlled Atmosphere System to allow visual assessment of the birds as they enter and pass through the system. The welfare standards will be reviewed as soon as further information about the availability of such equipment is known.**

S 8.15.1 * There must be sufficient time after exiting the CAS and prior to any other procedure (e.g. neck cutting) to assess the effectiveness of the kill.

S 8.16 On exiting the CAS, all birds must be checked immediately to ensure that they are dead.

S 8.17 Any birds found to be conscious on exiting the CAS must be removed and humanely killed immediately.

S 8.18 Verifiable records of birds recovering consciousness after exposure to gas mixtures must be maintained.

S 8.19 In case of failure, there must be a back-up slaughter method available and ready for use at all times which is capable of dealing with all birds awaiting slaughter.

S 8.20 On exiting the CAS, birds must be checked thoroughly to identify any signs of damage or injury which could have been caused whilst in the CAS.

S 8.21 The causes of injury relating to S 8.20 must be thoroughly investigated to ascertain where and how this may have occurred.

S 8.22 Where it is found that injury was caused while the birds were still conscious, immediate action must be taken to rectify the problem and to reduce the likelihood of such damage being caused to other birds.

S 8.23 A contingency plan must be drawn up to include details of what action would be taken if a breakdown occurred while birds were still in the CAS, to avoid prolonged delays.

S 8.23.1 Where live birds have remained in the CAS for longer than 2 minutes:

a) the system must be flushed with atmospheric air to remove the remaining gases

b) birds must be immediately removed for slaughter using a permitted back-up method.

S 8.24 There must be a means of flushing the system with atmospheric air.

Appendix 1

Transport – standard operating and emergency procedure

(relating to standard T 2.2)

Items to be included

1. Out of hours telephone numbers and 'emergency procedure'.
2. Accident procedure.
3. Certificate of motor insurance and MOT.
4. Tyres – punctures Code of Practice.
5. Mobile phones or other communication equipment (and procedures for use).
6. Guidelines on correct environmental conditions during the journey, depending on length of journey and ambient temperature.
7. RSPCA Welfare standards relating to transport of chickens.
8. Procedure for loading/unloading of poultry transporters.
9. Procedure for delivery of poultry to customer sites.
10. FTA – '*The Driver's Handbook*' (2006) including Tachograph Regulations.
11. Fire extinguisher.
12. Operating procedures for roadside checks.
13. MAFF/Defra leaflet '*Guide to Alleviation of Thermal Stress in Poultry in Lairage*' (PB 3724, 1998).

* Appendix 2

Foot pad burn assessment guide

(relating to standard S 3.2)

Score 0: no lesion/s

Score 1: very small, discolouration on limited area

Score 2: superficial lesion, dark papillae, substantial discolouration

Score 3: ulcers or scabs of significant size, signs of haemorrhages, swollen foot pad

(Pictures supplied courtesy of Dr Lotta Berg, Swedish Board of Agriculture)

* Appendix 3

Dirty feather assessment guide

(relating to standard S 3.2)

Front

Score 1: minor (light)

Score 2: mild (medium)

Score 3: severe (heavy)

Back

Score 1: minor (light)

Score 2: mild (medium)

Score 3: severe (heavy)

(Pictures supplied courtesy of 2 Sisters Food Group)

Index

RSPCA, Wilberforce Way, Southwater, Horsham, West Sussex RH13 9RS
Tel: 0300 1234 555 www.rspca.org.uk

ISBN 1 898331 72 3
COVER PHOTO: ANDREW FORSYTH/RSPCA PHOTOLIBRARY